UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/151,321	09/11/1998	EIICHI YOSHIDA	05058/75601	7557

24367   7590   05/08/2002

SIDLEY AUSTIN BROWN & WOOD LLP
717 NORTH HARWOOD
SUITE 3400
DALLAS, TX 75201

EXAMINER
TRAN, DOUGLAS Q

ART UNIT	PAPER NUMBER
2624	

DATE MAILED: 05/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16 and 18-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16 and 18-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2.   Claims 11-16 and 19-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

For at least amended claim 11 with a new limitation " ... such that the job management device can determine whether or not to route an input job <u>having a specific mode</u> to the image forming <u>apparatus based on whether any of the jobs stored in the memory has the specific mode of the input job.</u>" and " for amended claim 16 with a new limitation " wherein <u>when said input job has a specific mode,</u> said control device selects an image forming apparatus whose memory stores a job having the specific mode <u>of</u> the input job". These above limitations of both claims recite a server selects an image forming apparatus based on jobs stored in a memory of the image forming apparatus having the specific mode of the input job. However, lines 7-10 and 14-19 in page 18 in the specification, a server 6 just select a printer based on stored jobs in hard disk 206 of the server, not a memory of the printer, and printer status.

However, the Examiner cites the prior arts for rejection based on the limitations of the claims.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 1 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the

combination of Hower, Jr. et al. (US Patent No. 5,467,434) and Shibusawa et al. (US Patent No.

6,088,120) and Maniwa et al. (US Patent No. 5,768,483).

As to claim 1, Hower teaches that a device (25 in fig. 2) for selecting a network-

connected image forming apparatus from a plurality of network-connected image forming

apparatus (one of printers is selected by the server 25 in fig. 2), the device comprising:

a controller (a server 25 in fig. 2) for selecting one of image forming apparatuses (a

plurality of printers from12-1 to 12-N in fig. 2) connected with the network,

wherein when an input job (i.e., job ticket 35 in fig. 2) has a specific mode (i.e., the

properties of the printer: tray, finishing, stock, type of page described in fig. 3 and 5; col.4, lines

5-10) , the controller selects an image forming apparatus which has the specific mode at the time

the selection is made (note: after the job ticket or the combination of print job selections from the

host computer is matched with printer properties provided in one of the stored printer profiles, in

col. 4, lines 52-55, then one of the print profiles is selected , in col. 4, lines 55-61, finally one of

printers is selected based on the selected one of printer profile, in col. 4, lines 33-37; print job is

formed and including the property of the printer and also including the selected printer, col. 4,

line 65 to col. 5, line 2);

said controller registers the input job in the selected image forming apparatus (note: a server transmits the job ticket to the selected printer for printing after combining job ticket and print data into a job file col. 4, line 65 to col. 5, line 6).

However, Hower does not teach each of at least two of printers has a specific mode.

Shibusawa also teaches a server for selecting one of printers (col. 1, lines 43-45) in which each of at least two of printers has a specific mode (see fig. 4, a printer a and b have a specific mode: top-tray).

It would have been obvious to modify the printing system of Hower to have each of at least two of printers has a specific mode as taught by Shibusawa. The suggestion for modifying the system of Hower can be reasoned by one of ordinary skill in the art as set forth by Shibusawa because Shibusawa provides a server for selecting one of printers based on the attribute information from a user and controlling print job to the selected printer.

Although neither Hower nor Shibusawa teach a printer stores its own information such as properties, it would have been obvious in order for each of printers which has its own properties and which stores its own properties in the printer because the printer uses its own properties to perform the printing based on the commands from either the computer or a server. Thus, one or more properties being stored in the selected printer should be matched with the properties of selected printer in the server, so that the selected printer uses its own properties to perform the printing based on the commands from the server. Furthermore, Maniwa teaches an image forming apparatus comprising a memory for storing jobs (i.e., print profiles 1-n in fig. 8, note, in fig. 8; col. 21, lines 1-15, scan profile of digital copier 102 and scan profile of the server 104 are matched each other).

It would have been obvious to modify the printing system of either Hower or Shibusawa for having and storing one or more profiles in the output device as taught by Maniwa. The suggestion for modifying the system of either Hower or Shibusawa can be reasoned by one of ordinary skill in the art as set forth by Maniwa because Maniwa teaches the controller of the server easily controls the system when the profile of server and the output devices are exchanged each other.

As to claim 6, Maniwa teaches controller selects an image forming apparatus not storing a specific mode job when the job is not a specific mode (col. 18, lines 60-65).

As to claim 7, Maniwa teaches the controller selects an image forming apparatus not storing a job when an image forming apparatus storing a specific mode job cannot be referenced (col. 18, lines 60-65).

As to claim 8, Maniwa teaches controller selects an image forming apparatus having the greatest remaining memory when an image forming apparatus storing no job cannot be referenced (col. 18, lines 60-65).

As to claim 9, Maniwa teaches the controller receives information from an image forming apparatus regarding the size of paper attached to the image forming apparatus (in fig. 8, profiles from a server and a copier are the same) and selects an image forming apparatus storing a specific mode job and registers a job in the selected image forming apparatus (col. 17, lines 60-65) when no image forming apparatus has a paper suitable for the job (col. 18, lines 60-65).

As to claim 10, Maniwa teaches notice means (NIC 106 and Message to WS 103 in fig. 5) for notifying to set a paper (col. 25, line 5) using the job to the selected image forming apparatus.

5.　　Claims 2-5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hower, Jr., Shibusawa and Applicant's admitted prior art.

As to claims 2-5 and 18, the combination of Hower and Shibusawa teaches the main feature in claim 1 as indicated above except a mode for temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding, or notify a user to place an indicated type of paper.

Applicant's admitted prior art teaches features which are well known such as a mode for temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding, or notify a user to place an indicated type of paper (page 2 line 18 to page 3, line 4).

It would have been obvious to modify the printing system of Hower and Shibusawa to have a mode for temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding, or notify a user to place an indicated type of paper as taught by Applicant's admitted prior art. The suggestion for modifying the system of Hower and Shibusawa can be reasoned by one of ordinary skill in the art as set forth by Applicant's admitted prior art because Applicant's admitted prior art provides the well known features including the optional modes such as temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding to the properties of Hower and Shibusawa. Therefore, the more properties to the printing system the more flexible to allow the server can select one of printers.

6.   Claims 11, 15-16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over the combination of Hower and Maniwa (US Patent No. 5,768,483).

As to claim 11, Hower teaches:

the server for determining to route a input job (print job) having a specific mode (printer

property) to the image forming apparatus based on any of the jobs stored in the memory has the

specific mode of the input job (note: after the job ticket or the combination of print job selections

from the host computer is matched with printer properties provided in one of the stored printer

profiles, in col. 4, lines 52-55, then one of the print profiles is selected , in col. 4, lines 55-61,

finally one of printers is selected based on the selected one of printer profile, in col. 4, lines 33-

37).

Although Hower does not teaches the printer having reporting means for reporting the

status of memory which indicates a specific mode in the stored job to the server, Hower teaches

the server already stores a plurality of modes of each of printers in the profile. Therefore, the

printers provide the specific mode to a server, which is well known in the prior art. Furthermore,

Maniwa also teaches an image forming apparatus comprising a memory for storing jobs (i.e.,

print profiles 1-n in fig. 8); and reporting means for reporting the status of memory of the output

device to a server (in fig. 8; col. 21, lines 1-15; note: scan profile of digital copier 102 and scan

profile of the server 104 are copied each other. Therefore, the output device has means for

reporting the status of print profile in the memory to the MFS.NLM of the server).

It would have been obvious to modify the system of Hower for reporting the profile in a

memory of the output device to a server as taught by Maniwa. The suggestion for modifying the

system of Hower can be reasoned by one of ordinary skill in the art as set forth by Maniwa

because Maniwa teaches the controller of the server easily controls the system when the profile

of server and the output devices are exchanged each other.

As to claim 15, Maniwa teaches image forming means for forming images on recording

medium in order of the sequence of jobs stored in the memory (fig. 5).

As to claim 16, Hower teaches:

A network for transmitting data (see fig. 1);

A control device (25 in fig. 2)for selecting one of the plurality of image forming

apparatus connected (a plurality of printers from12-1 to 12-N in fig. 2) with the network and for

registering an input job in the selected image forming apparatus (note: a server transmits the job

ticket to the selected printer for printing after combining job ticket and print data into a job file

col. 4, line 65 to col. 5, line 6),

wherein when the input job (i.e., job ticket 35 in fig. 2) has a specific mod (i.e., the

properties of the printer: tray, finishing, stock, type of page described in fig. 3 and 5; col.4, lines

5-10)e, the control device selects an image forming apparatus whose memory stores a job having

the specific mode of the input job (note: after the job ticket or the combination of print job

selections from the host computer is matched with printer properties provided in one of the

stored printer profiles, in col. 4, lines 52-55, then one of the print profiles is selected , in col. 4,

lines 55-61, finally one of printers is selected based on the selected one of printer profile, in col.

4, lines 33-37).

the motivation of this claim is applied as in the motivation of claim 11.

As to claims 19-20, Hower teaches the specific mode of the prior job stored in the image forming apparatus can be a manual paper-feeding mode (because properties of the printers can include a manual paper feeding mode).

7.   Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hower, Jr. , Maniwa and Applicant's admitted prior art.

As to claims 12-14, the combination of Hower and Maniwa teaches the main feature in claim 1 as indicated above except a mode for temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding, or notify a user to place an indicated type of paper.

Applicant's admitted prior art teaches features which are well known such as a mode for temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding, or notify a user to place an indicated type of paper (page 2 line 18 to page 3, line 4).

It would have been obvious to modify the printing system of Hower and Maniwa to have a mode for temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding, or notify a user to place an indicated type of paper as taught by Applicant's admitted prior art. The suggestion for modifying the system of Hower and Maniwa can be reasoned by one of ordinary skill in the art as set forth by Applicant's admitted prior art because Applicant's admitted prior art provides the well known features including the optional modes such as temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding to the properties of Hower and Maniwa..

Therefore, the more properties to the printing system the more flexible to allow the server can

select one of printers.

Response to Arguments and Amendment

Applicant's arguments filed 2/20/02 have been fully considered but they are not

persuasive.

Applicant asserted in page 8 that:

(1) " Hower does not teach or suggest a controller for selecting one of the plurality of

image forming apparatuses connected with the network, wherein when an input job has a specific

mode, the controller selects an image forming apparatus which has a specific mode and which

stores job having the specific mode of the input job at the time the selection is made.". In reply,

Hower clearly teaches that a controller (a server 25 in fig. 2) for selecting one of the plurality of

image forming apparatuses (a plurality of printers from12-1 to 12-N in fig. 2) connected with the

network, wherein when an input job (i.e., job ticket 35 in fig. 2) has a specific mode (i.e., the

properties of the printer: tray, finishing, stock, type of page described in fig. 3 and 5; col.4, lines

5-10) , the controller selects an image forming apparatus which has the specific mode at the time

the selection is made (note: after the job ticket or the combination of print job selections from the

host computer is matched with printer properties provided in one of the stored printer profiles, in

col. 4, lines 52-55, then one of the print profiles is selected , in col. 4, lines 55-61, finally one of

printers is selected based on the selected one of printer profile, in col. 4, lines 33-37; print job is

formed and including the property of the printer and also including the selected printer, col. 4,

line 65 to col. 5, line 2).

Although neither Hower nor Shibusawa teach a printer stores its own information such as properties, it would have been obvious in order for each of printers which has its own properties and which stores its own properties in the printer because the printer uses its own properties to perform the printing based on the commands from either the computer or a server. Thus, one or more properties being stored in the selected printer should be matched with the properties of selected printer in the server, so that the selected printer uses its own properties to perform the printing based on the commands from the server. Furthermore, Maniwa teaches an image forming apparatus comprising a memory for storing jobs (i.e., print profiles 1-n in fig. 8, note, in fig. 8; col. 21, lines 1-15, scan profile of digital copier 102 and scan profile of the server 104 are matched each other).

Applicant asserted in page 9 that:

(2) " That is to say. Hower does not teach or suggest selecting a printer based on whether a particular type of print job is stored in the memory of the printer. " . In reply, the limitation of "the memory of the printer" is to be not read into claim 1. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, if the applicant compares between the limitation of (1) above and (2), the applicant will be find the limitations (1) is quite different (2). Because, in the limitation of (2) requires: first, a particular type of print job (note: the print job which should include print data and command data and which should be created from the user application or a server) is stored in the memory of the printer, and then a printer is selected based on that information.

Applicant asserted in page 11 that: " Neither Maniwa nor Hower teaches or discloses a network system which requires a plurality of image forming apparatus each having a discriminating means for discriminating a status of the memory based on whether the memory stores a job having a specific mode; and a reporting means for reporting to the network the status of the memory of any of the plurality of image forming apparatus whose memory stores a job having a specific mode." In reply, the limitation of "discriminating means for discriminating a status of the memory based on whether the memory stores a job having a specific mode" is not to be supported by anywhere in the specification of the application. Although Hower does not teaches the printer having reporting means for reporting the status of memory which indicates a specific mode in the stored job to the server, Hower teaches the server already stores a plurality of modes of each of printers in the profile. Therefore, the printers provide the specific mode to a server, which is well known in the prior art. Furthermore, Maniwa also teaches an image forming apparatus comprising a memory for storing jobs (i.e., print profiles 1-n in fig. 8); and reporting means for reporting the status of memory of the output device to a server (in fig. 8; col. 21, lines 1-15; note: scan profile of digital copier 102 and scan profile of the server 104 are copied each other. Therefore, the output device has means for reporting the status of print profile in the memory to the MFS.NLM of the server).

For the above reasons, it is believed that the cited prior art fully discloses the claimed invention and the rejection stand.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS A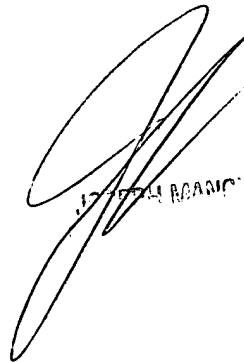CTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran
May. 04, 2002